EasyInput

a more effective user work due to integration of SAP and MS Excel

Developer Tips & Tricks

SAP Gold Partner

BCC Data Centers

BCC EXTRA

- EasyInput is one of the products from the **BCC EXTRA offering**.

- BCC EXTRA is a set of unique products allowing you to boost the effectiveness of the use of SAP systems at low cost. These are functionalities developed in-house by BCC, enhancing the SAP system standard, and the tools facilitating the SAP system implementation and development.

- We build EXTRA products based on a many-year implementation experience gained while working for different customers from Poland and abroad.

More BCC EXTRA products at: **www.bccgroup.eu/extra**

SAP System Preparation

- To prepare and use EasyInput workbooks one needs SAP authorizations that are described in user's and administrator's manuals (for functional scripts additional authorizations for used function modules can be needed).
- For reading data from SAP with transaction script, apart from authorizations also setting on the mandant level, that is described in user's and administrator's manuals, is needed (in full version this can be omitted via use of BCC function module)
- Sometimes one needs to have certain ports open for EasyInput (depends on the SAP system, usually 33XX port). Please contact your SAP system administrator when experiencing problems with connection.
- Make sure that the SAP system has the required version (ECC 6.0 or later)
- Make sure that EasyInput is properly installed on the workstation (requires windows Vista or later Microsoft system, SAP GUI 7.30 with at least patch 8 and MS Excel 2007 or later)

Before Starting Script Creation

- Check whether the needed script is not part of the EasyInput example scripts pack provided with the installation. The Functional Scripts and simpler Transaction Scripts usually can be reused in another system. If the script cannot be reused, perhaps it is worth to look at it to get the idea how to prepare one's own.

- Decide whether it is better to record a transaction (SHDB) or use a BAPI function module (BAPI). Although the use of BAPI functions module can be a bit more difficult, the functional scripts are less system/ version dependent and will probably require no maintenance in future.

- Look up the http://easyinput.net forum (especially the FAQ part) to check whether there are any clues how to prepare the given script. If there are not enough information one can try asking other forum users on the EasyInput Discussion Room panel.

EasyInput Workbook Creation – General Rules

- If there exists an example EasyInput workbook that fulfills one needs one can test it/adjust if necessary.
- If there is no suitable example then one should open the EasyInput Template (under PERSONAL templates), and start creating theirs script from scratch.
  - For business users transaction scripts can be easier to create, as the users are familiar with business transactions within SAP
  - For users with IT knowledge, it is recommended to create functional scripts based on BAPI modules when possible. Such scripts are easier to move them between systems and will require less maintenance effort in case of upgrades, other system changes.
- A EasyInput workbook should, if possible, implement both test and actual run. This facilitates further processing when lots of data needs to be processed quickly.
- After EasyInput workbook testing, unnecessary configuration worksheets should be hidden (see the relevant button on the EasyInput ribbon menu)

EasyInput Workbook Creation – Order of Worksheets Fulfillment

EI_Logon *	• SAP User ID • SAP Connection Info
EI_ScriptName *	• General Script Settings (e.g. Script Type) • Optional Macro Attachment
EI_Script_XX (TR or FM)	• Script Details • Linking Script with Data
EI_Data	• Data Formatting and Search Help • Data Column Order
EI_Config	• General EasyInput Workbook Settings • Optional EasyInput Licensing Information

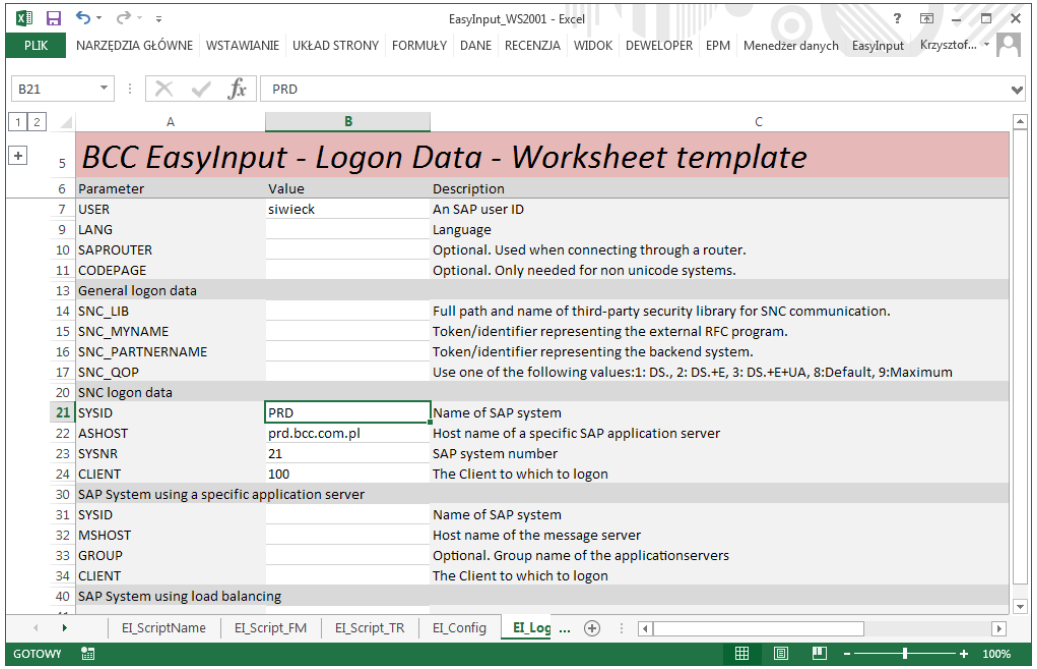
* The order of two first worksheets can be swapped

EasyInput Workbook Creation – Order of Worksheets Fulfillment 1/7

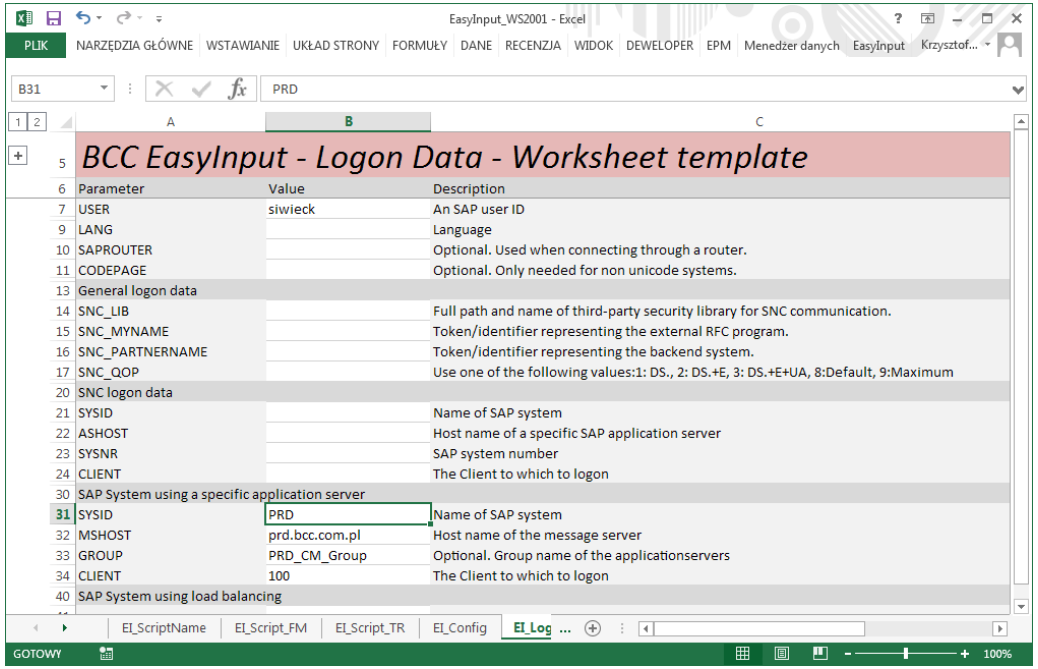
- Fill in EI_Logon information at the beginning so that all the functionalities requiring connection to SAP system could work
- Before going to script details (EI_Script_XX) fill in the script general information (EI_ScriptName) to set the script name, ID and type. Script ID will be needed on the script details worksheet.
- It is recommended to generate the headings of the data worksheet (EI_Data) on the base of script definition. Than, the order of data columns can be adjusted to user's needs.
- General workbook configuration (EI_Config) can usually be done at the end.
- When the script is tested one can hide the configuration worksheets as they are no longer necessary. Only the EI_Logon and EI_Data worksheets will stay visible.

EasyInput Workbook Creation – Order of Worksheets Fulfillment 2/7

- Fill in EI_Logon information at the beginning so that all the functionalities requiring connection to SAP system could work


EasyInput_WS2001 - Excel
B21
PRD
BCC EasyInput - Logon Data - Worksheet template
Parameter | Value | Description
USER | siwieck | An SAP user ID
LANG | | Language
SAPROUTER | | Optional. Used when connecting through a router.
CODEPAGE | | Optional. Only needed for non unicode systems.
General logon data
SNC_LIB | | Full path and name of third-party security library for SNC communication.
SNC_MYNAME | | Token/identifier representing the external RFC program.
SNC_PARTNERNAME | | Token/identifier representing the backend system.
SNC_QOP | | Use one of the following values:1: DS., 2: DS.+E, 3: DS.+E+UA, 8:Default, 9:Maximum
SNC logon data
SYSID | PRD | Name of SAP system
ASHOST | prd.bcc.com.pl | Host name of a specific SAP application server
SYSNR | 21 | SAP system number
CLIENT | 100 | The Client to which to logon
SAP System using a specific application server
SYSID | | Name of SAP system
MSHOST | | Host name of the message server
GROUP | | Optional. Group name of the applicationservers
CLIENT | | The Client to which to logon
SAP System using load balancing
EI_ScriptName
EI_Script_FM
EI_Script_TR
EI_Config
EI_Log
GOTOWY
100%

EI_Logon entry example for specific application server


EasyInput_WS2001 - Excel
B31
PRD
BCC EasyInput - Logon Data - Worksheet template
Parameter | Value | Description
USER | siwieck | An SAP user ID
LANG | | Language
SAPROUTER | | Optional. Used when connecting through a router.
CODEPAGE | | Optional. Only needed for non unicode systems.
General logon data
SNC_LIB | | Full path and name of third-party security library for SNC communication.
SNC_MYNAME | | Token/identifier representing the external RFC program.
SNC_PARTNERNAME | | Token/identifier representing the backend system.
SNC_QOP | | Use one of the following values:1: DS., 2: DS.+E, 3: DS.+E+UA, 8:Default, 9:Maximum
SNC logon data
SYSID | | Name of SAP system
ASHOST | | Host name of a specific SAP application server
SYSNR | | SAP system number
CLIENT | | The Client to which to logon
SAP System using a specific application server
SYSID | PRD | Name of SAP system
MSHOST | prd.bcc.com.pl | Host name of the message server
GROUP | PRD_CM_Group | Optional. Group name of the applicationservers
CLIENT | 100 | The Client to which to logon
SAP System using load balancing
EI_ScriptName
EI_Script_FM
EI_Script_TR
EI_Config
EI_Log
GOTOWY
100%

EI_Logon entry example for group load balancing

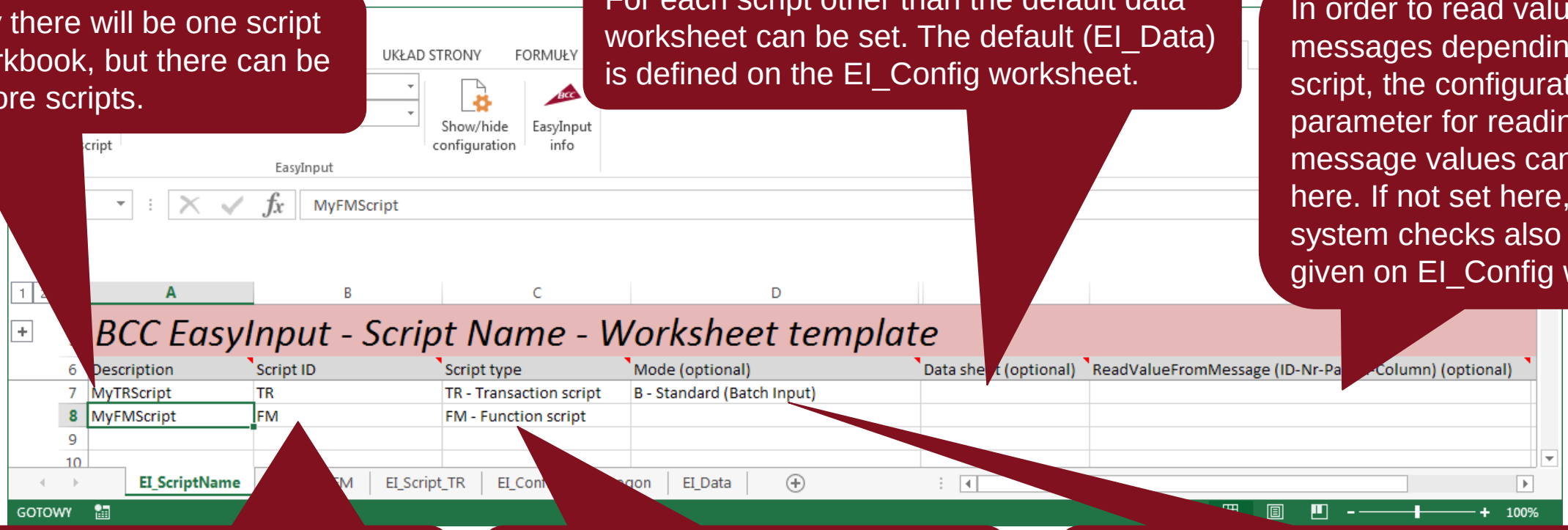
EasyInput Workbook Creation – Order of Worksheets Fulfillment 3/7

- Before going to script details (EI_Script_XX) fill in the script general information (**EI_ScriptName**) to set the script name, ID and type. Script ID will be needed on the script details worksheet.

Usually there will be one script per workbook, but there can be also more scripts.

For each script other than the default data worksheet can be set. The default (EI_Data) is defined on the EI_Config worksheet.

In order to read values from messages depending on the script, the configuration parameter for reading message values can be set here. If not set here, then the system checks also the value given on EI_Config worksheet.



For each script its unique ID (used than on EI_Script_XX worksheet in column A) should be chosen.

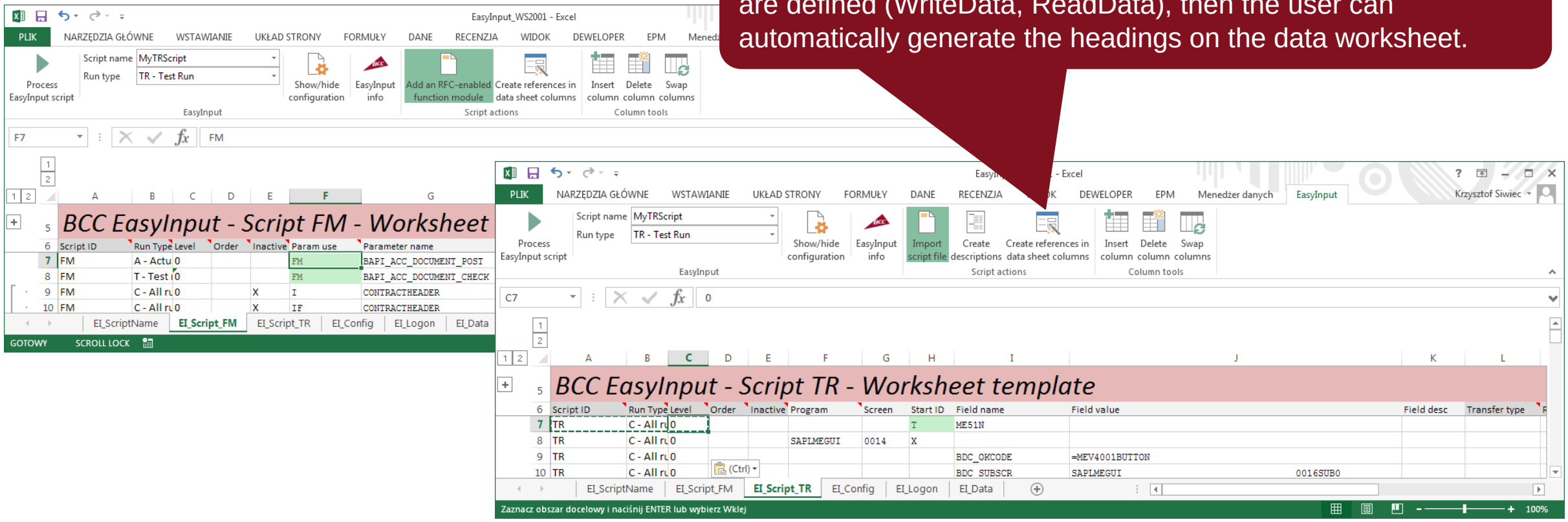
For each script its type (transaction or function script) should be chosen.

For transaction scripts Mode can be set (if not set here taken from the settings on EI_Config worksheet).

EasyInput Workbook Creation – Order of Worksheets Fulfillment 4/7

- Fill in the **EI_Script_XX** worksheet (FM for function sctipt or TR for transaction script). For details see separate PDF tutorials on each script type.

When script preparation is finished and links to data worksheet are defined (WriteData, ReadData), then the user can automatically generate the headings on the data worksheet.


EasyInput_WS2001 - Excel
Script name MyTRScript
Run type TR - Test Run
Process EasyInput script
Show/hide configuration
EasyInput info
Add an RFC-enabled function module
Create references in data sheet columns
Insert column
Delete column
Swap columns
EasyInput
Script actions
Column tools
F7
FM
BCC EasyInput - Script FM - Worksheet
Script ID | Run Type | Level | Order | Inactive | Param use | Parameter name
FM | A - Actu | 0 | | | FM | BAPI_ACC_DOCUMENT_POST
FM | T - Test | 0 | | | FM | BAPI_ACC_DOCUMENT_CHECK
FM | C - All ru | 0 | | X | I | CONTRACTHEADER
FM | C - All ru | 0 | | X | IF | CONTRACTHEADER
EI_ScriptName
EI_Script_FM
EI_Script_TR
EI_Config
EI_Logon
EI_Data
GOTOWY
SCROLL LOCK
Import script file
Create descriptions
Menedżer danych
Krzysztof Siwiec
C7
0
BCC EasyInput - Script TR - Worksheet template
Script ID | Run Type | Level | Order | Inactive | Program | Screen | Start ID | Field name | Field value | Field desc | Transfer type
TR | C - All ru | 0 | | | | | T | ME51N
TR | C - All ru | 0 | | | SAPLMEGUI | 0014 | X
TR | C - All ru | 0 | | | | | | BDC_OKCODE | =MEV4001BUTTON
TR | C - All ru | 0 | | | | | | BDC_SUBSCR | SAPLMEGUI 0016SUB0
Zaznacz obszar docelowy i naciśnij ENTER lub wybierz Wklej
100%

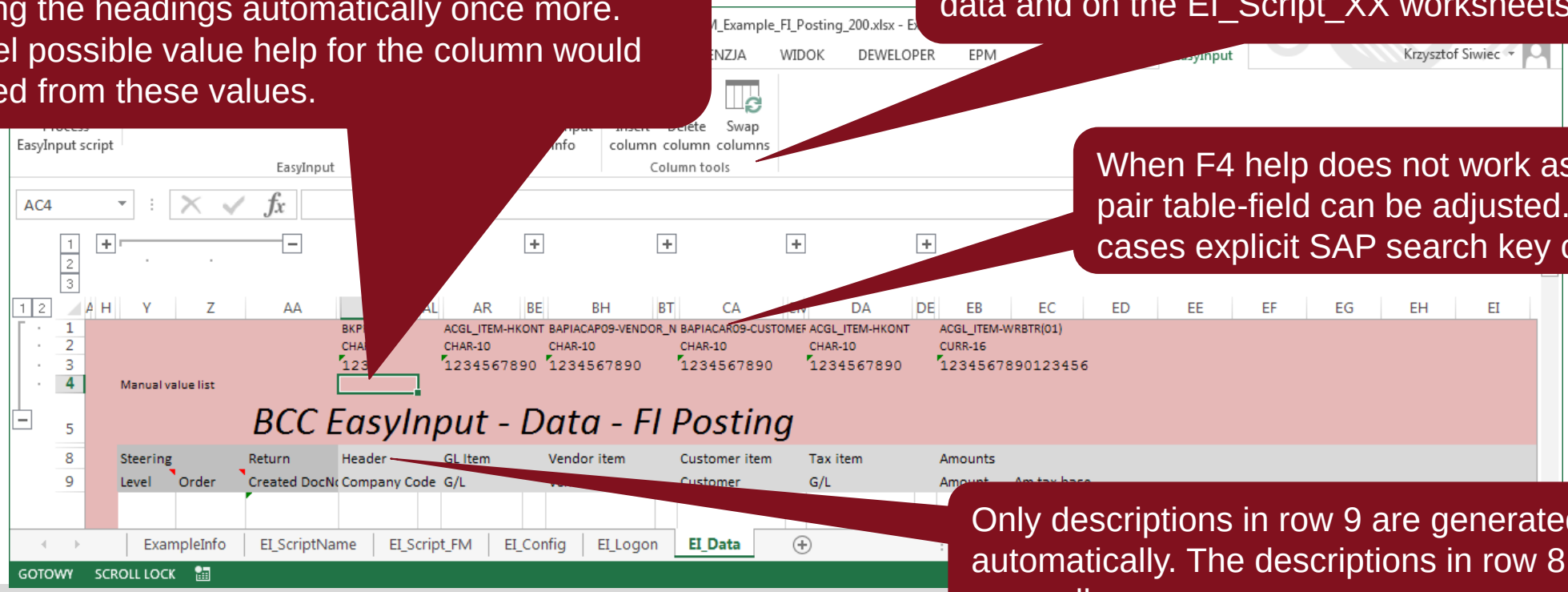
EasyInput Workbook Creation – Order of Worksheets Fulfillment 5/7

- When the headings of the data worksheet (EI_Data) are generated on the base of script definition, than the order of data columns can be adjusted to user's needs. Only columns AA and higher can be used for data. The columns A-Z are reserved.

One can put here constants separated with comma sign (e.g. 1000,1001). These will be used when generating the headings automatically once more. The Excel possible value help for the column would be created from these values.

Use *Column tools* to change the order of the columns (this will effect in changes to both the data and on the EI_Script_XX worksheets.

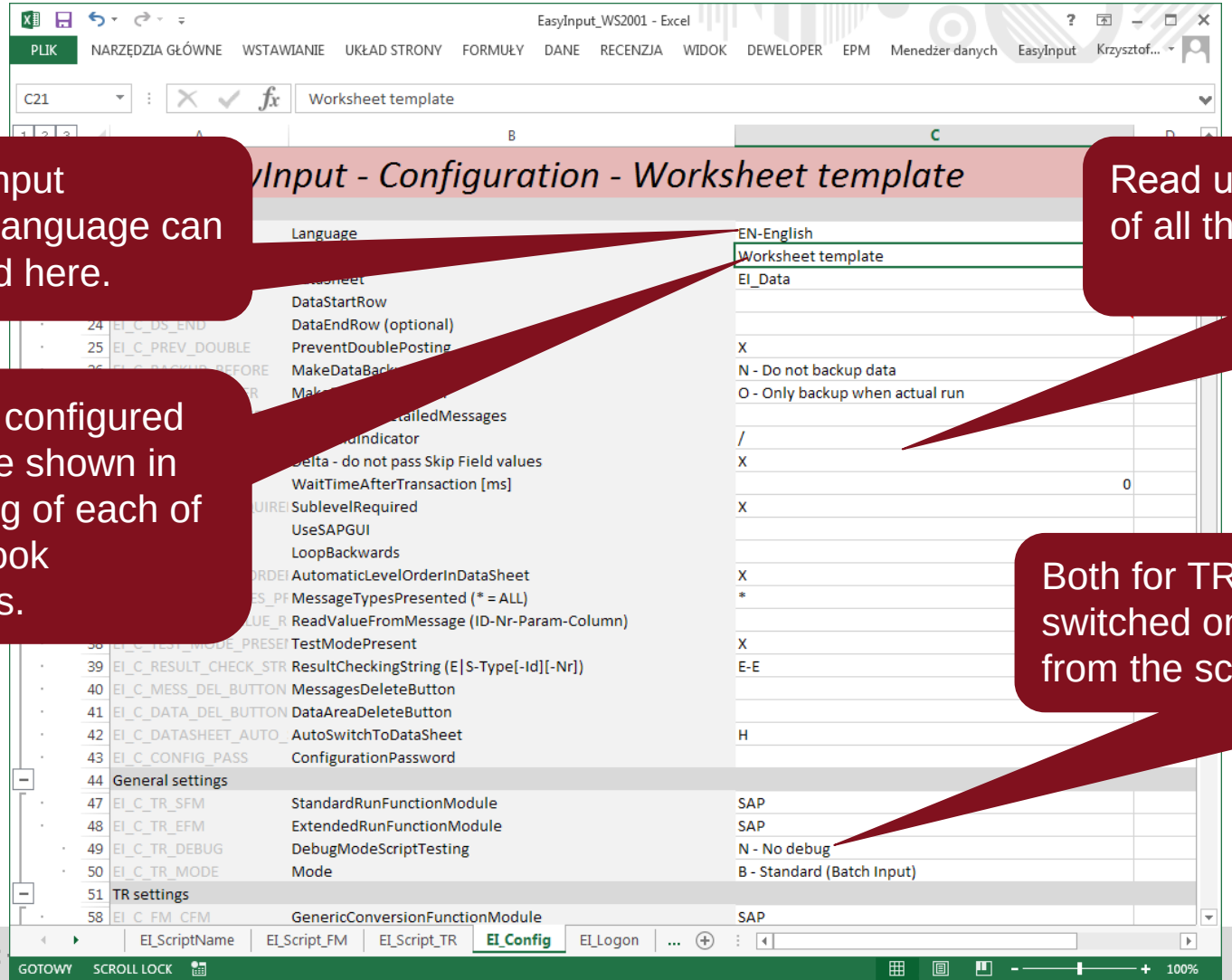
When F4 help does not work as expected, the pair table-field can be adjusted. In special cases explicit SAP search key can be added.



Only descriptions in row 9 are generated automatically. The descriptions in row 8 can be added manually.

EasyInput Workbook Creation – Order of Worksheets Fulfillment 6/7

- General workbook configuration (**EI_Config**) can usually be done at the end.



The EasyInput workbook language can be selected here.

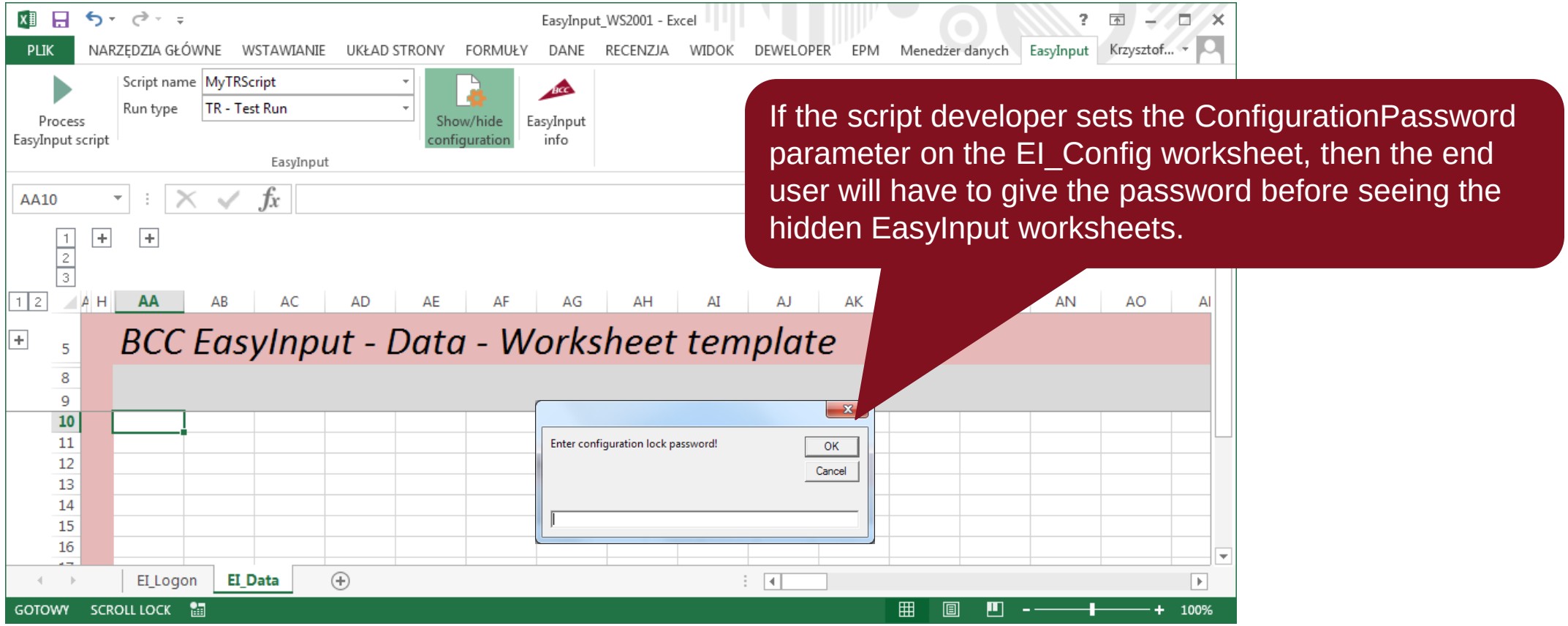
Read user's manual for the detailed descriptions of all the configuration settings.

The name configured here will be shown in the heading of each of the workbook worksheets.

Both for TR and FM scripts debugging can be switched on. It is useful when removing error from the scripts.

EasyInput Workbook Creation – Order of Worksheets Fulfillment 7/7

- When the script is tested one can hide the configuration worksheets as they are no longer necessary. Only the EI_Logon and EI_Data worksheets will stay visible.

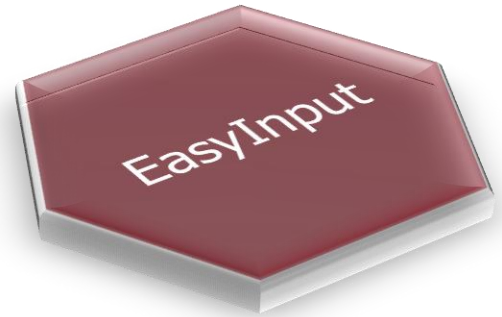


When Developping a Script

- When creating the **transaction scripts**, the BDC_CURSOR fields should not be linked with the data worksheet via WriteData. BDC_CURSOR stands for cursor positioning not for transferring data to SAP.

- When creating the **functional scripts** all the script rows are set to inactive (”X”) in the Inactive column.

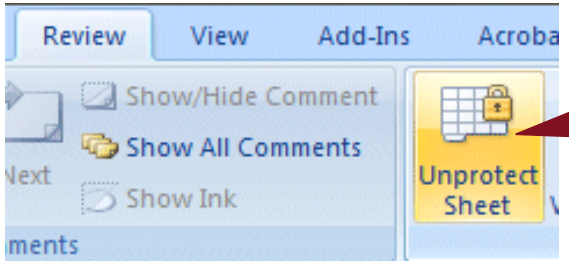
  Remember to remove the „X” for linked rows!



Unprotecting EI_Script_TR or EI_Script_FM worksheet

- Both EI_Script_TR and EI_Script_FM worksheets are protected. To change formatting of the cell (useful when one wants to put formula in the column ”Field Value”) or to delete unnecessary rows one has to switch the protection off.

- To switch the protection of the worksheet off, please select the ”Review” ribbon and click the ”Unprotect” button. Remember that when saving the workbook the protection will be set on again!

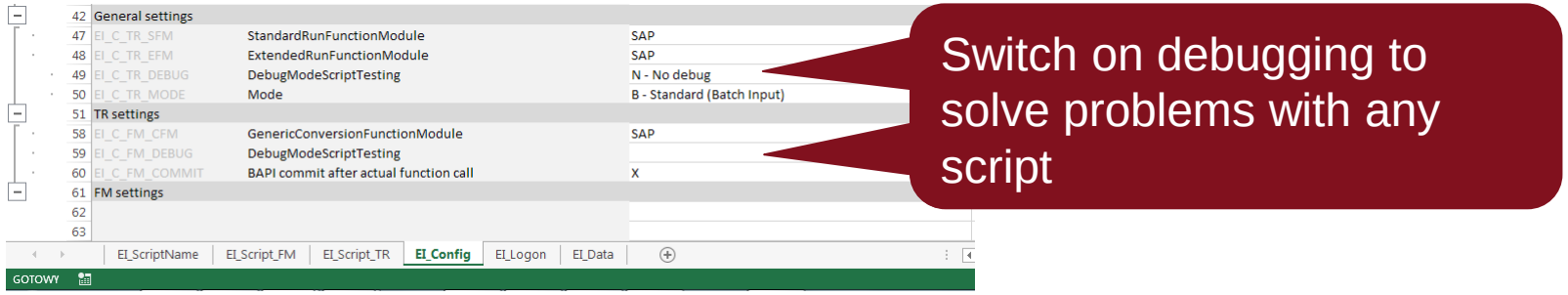


Use standard MS Excel ribbon menu to unprotect a worksheet.

How to Debug a Script

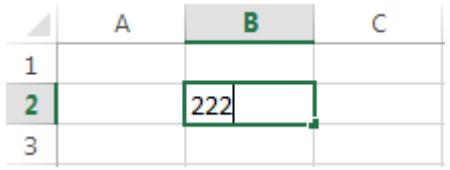
- Transaction Script – one can switch on the debugging for all screens to see, what actually the script is doing. It facilitates to discover errors in the script. When in debug mode only the first data record (transaction) is processed.

- Functional Script – also for functional script debugging option is available. It produces the additional worksheet (EI_Debug) with parameters that are passed to the functional module (be careful, this parameters are in external format). The functional module can be then manually tested in SAP GUI with transaction SE37.



MS Excel „Edit mode”

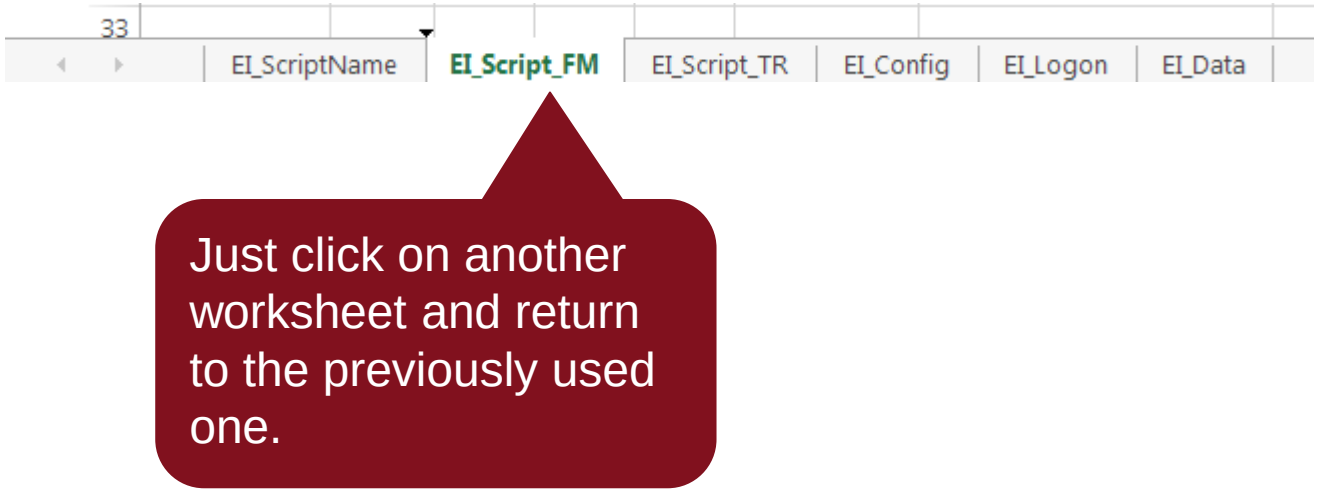
- When a user double clicks on an Excel cell or presses F2 after selecting the cell the Excel enters the so called „Edit mode”. In this mode the user can change the cell value.



- When the Excel workbook is in the „Edit mode” no VBA macro can run. This means none of the EasyInput functionality will run while in „Edit mode”.
- To start any EasyInput action while in „Edit mode” one has to close the „Edit mode” using key „ESC” on the keyboard or by selecting another cell with the mouse click.
- Starting from version 2.50 EasyInput ribbon buttons are disabled while in „Edit mode”.

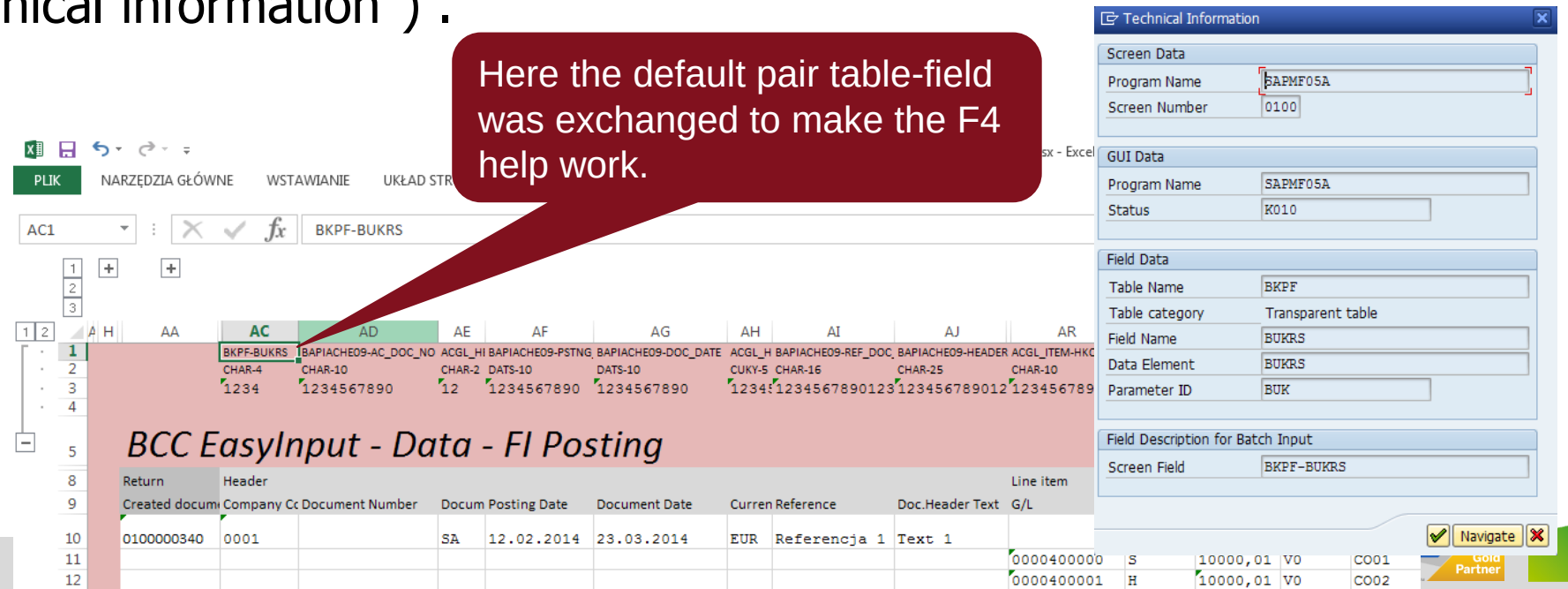
Excel refresh problem

- MS Excel has sometimes problems with refreshing worksheets switched by code.
- Do not panic! Go back to the EasyInput workbook and select another worksheet on the workbook. Than return to the original worksheet it should repair the refresh problem.



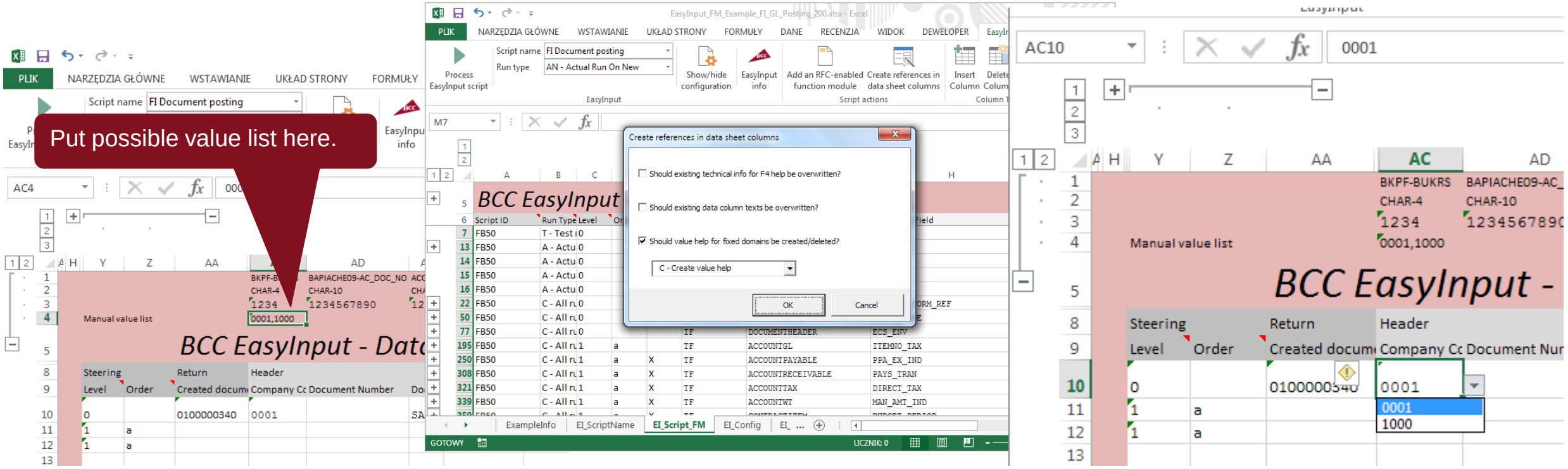
F4 Search Help not Working

- If it is not working in MS Excel at all, please patch the SAP GUI version
- If it is not working for a given column on the data worksheet than one can try to exchange the contents of the row 1 for that column with another field-table pair or with the technical ID of ABAP search help (one can find it perhaps in another transaction that uses the same field, by selecting the field, pressing F1 and choosing „Technical information”) .



Want to add easily standard MS Excel value help?

- To add standard MS Excel value help for data column:
  - Put possible values separated by comma in the 4th row of the data sheet
  - Go into EI_Script worksheet and „Create references in data sheet columns”
  - The standard MS Excel value help for the column is generated
  - It can be deleted or updated similarly - by running „Create references in data sheet columns”



www.bccgroup.eu/extra

Free trial version
Order online
Other BCC EXTRA products